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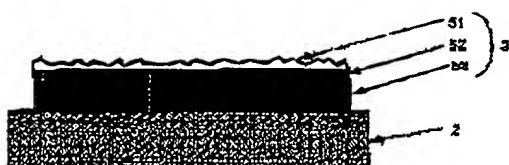
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## (54) ELECTRIC FIELD ELECTRON EMITTING ELEMENT, AND MANUFACTURE OF IT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a very stable emission electric current, by containing at least diamond and fullerence in an emitter part, in an electric field electron emitting element.

**SOLUTION:** An emitter 3 is constituted of a diamond layer 51, a junction layer 52 containing fullerence, and a conductive layer 53 for electrically connecting between an element electrode 2 and the junction layer 52. When the junction layer 52 has the function of the conductive layer 53, the function of the conductive layer 53, the conductive layer 53 is not necessary. The emitter 3 has diamond on a surface, and the fullerence is joined to at least part of the element electrode 2 or the conductive layer 53. In the electric field emission element, the fullerence is preferably C60 or C70. This can increase the electron emission quantity of the element, and can obtain a long life electric field emission element.



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